

I2. TREATMENT STUDIES FOR PORT NEWARK REACH A -- 1996

OENJ (Ref 13)

Lime & fly ash reactivity test

The main benefits of lime stabilization are workability, improved strength, and volume stability. Lime is not very effective for cohesionless soil, except when mixed with other pozzolans such as fly ash. Workability is improved due to flocculation of the soil particle, which makes the soil more friable. Lime provides immediate strength which makes the soil firmer and more water resistant to allow for quicker and easier trafficability. Lime also increases the optimum water content for compaction which is advantageous when dealing with wet soil. In the first few hours after mixing, the lime & fly ash provides a steady increases in strength. Because the of the slow curing rate, immediate compaction after mixing is not as critical with lime & fly ash as is with cement